#95 TINNING FLUX (LEAD FREE)

SECTION 1 **IDENTITY OF MATERIAL**

Trade Name:	OATEY #95 TINNING FLUX (LEAD FREE)
Product Numbers:	30372, 30373, 30374, 30375
Formula:	N/A
Synonyms:	Flux for Copper Pipe
Firm Name & Mailing Address:	OATEY CO. 4700 West 160th Street P.O. Box 35906 Cleveland, Ohio 44135, U.S.A. http://www.oatey.com
Oatey Phone Number:	(216) 267-7100
Emergency Phone Numbers:	For Emergency First Aid call 1-303-623-5716 COLLECT. For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300

SECTION 2 **COMPOSITION**

INGREDIENTS:	%:	CAS NUMBER:	ACGIH TLV TWA:	OSHA PEL TWA:
Petrolatum	60 - 70%	8009-03-8	5 mg/m3 (oil mist)	5 mg/m3 (oil mist)
Zinc Chloride	15 - 25%	7646-85-7	1 mg/m3(fume) 2 mg/m3 STEL	1 mg/m3(fume)
Ammonium Chloride	1 - 4%	12125-02-9	10 mg/m3 (fume) 20 mg/m3 STEL	None Established
Tin (metal)	4 - 8%	7440-31-5	2 mg/m3	2 mg/m3
Copper (fume)	0 - 1%	7440-50-8	0.2 mg/m3(fume)	0.1 mg/m3(fume)
Bismuth	0 - 1%	7440-69-9	None Established	None Established

SECTION 3 **EMERGENCY OVERVIEW**

Green paste with a slight odor. Corrosive. Toxic. May cause burns to the eye and skin. Inhalation of fumes may cause respiratory irritation, metal fume fever, chills, nausea, vomiting and pulmonary edema. Swallowing may cause burns to the mouth or throat, vomiting, diarrhea and kidney or liver disorders. May be fatal. Symptoms may be delayed.

NFPA Hazard Signal: Health: 3 Stability: 1 Flammability: 0 Special: None
HMIS Hazard Signal: Health: 3* Stability: 1 Flammability: 0 Special: None
OSHA Hazard Classification: Corrosive, toxic, target organ effects
Canadian WHIMS Classification: Class E

SECTION 4 **EMERGENCY AND FIRST AID PROCEDURES - CALL 1-303-623-5716 COLLECT**

Skin: Remove contaminated clothing. Wash thoroughly with soap and water. Call a physician or poison control center if irritation persists.

Eyes: Remove contact lenses if any. Rinse eyes with water for 15 minutes. Get immediate medical attention.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Call a poison control center or physician immediately.

Ingestion: **DO NOT INDUCE VOMITING.** Rinse mouth with water. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital.

SECTION 5 FIRE FIGHTING MEASURES

Flashpoint / Method:	N/A
Flammability:	LEL = N/A, UEL = N/A
Extinguishing Media:	Small Fires: Use dry chemical, CO2, water, or foam extinguisher Large Fires: Evacuate area and call Fire Department immediately
Special Fire Fighting Procedure:	Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored
Unusual Fire and Explosion Hazards:	None known.
Hazardous Decomposition Products:	Hydrocarbons, hydrogen chloride, zinc fumes, tin fumes, copper fumes, ammonia, smoke, carbon monoxide, carbon dioxide and nitrogen oxides.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures:	Ventilate area. Stop leak if it can be done without risk. Personnel cleaning up the spill should wear appropriate personal protective equipment. Take up spill with sand, earth or other absorbent material and place into a clean, dry leak-proof container.

SECTION 7 HANDLING AND STORAGE

Handling:	Do not get in eyes. Do not get on skin or clothing. Do not take internally. Avoid breathing vapors or fumes. Use only with adequate ventilation. Wash thoroughly after handling. Keep container closed when not in use. Handle with care. Keep out of reach of children.
Storage:	Store in original, labeled container.
Other:	Containers, even empty will retain residue and may be harmful.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation:	Good general ventilation (equivalent to outdoors) should be adequate for normal use. For operations where the TLV may be exceeded, mechanical ventilation such as local exhaust may be needed to maintain exposure levels below applicable limits.
Respiratory Protection:	For operations where the TLV may be exceeded, a NIOSH/MSHA approved particulate respirator or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.
Skin Protection:	Wear rubber gloves.
Eye Protection:	Safety glasses with sideshields or safety goggles.
Other:	Eye wash and safety shower should be available.

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
Boiling Point:	638 Degrees F / 337 C
Melting Point:	N/A
Vapor Pressure:	N/A
Vapor Density:	(Air = 1) @482 C = 50
Volatile Components:	1-4%
Solubility In Water:	Negligible
pH:	N/A
Specific Gravity:	1.1
Evaporation Rate:	N/A
Appearance:	Green Paste
Odor:	Very little odor
Will Dissolve In:	Methylene Chloride
Material Is:	Paste

SECTION 10	STABILITY AND REACTIVITY
Stability:	Stable.
Conditions To Avoid:	None.
Hazardous Decomposition Products:	Hydrocarbons, hydrogen chloride, zinc fumes, tin fumes, copper fumes, ammonia, smoke, carbon monoxide, carbon dioxide and nitrogen oxides.
Incompatibility/ Materials To Avoid:	Strong oxidizing agents, potassium, cyanides and sulfides.
Hazardous Polymerization:	Will not occur.

SECTION 11	DISPOSAL INFORMATION
Waste Disposal:	Dispose of in accordance with federal, state, and local regulations. It is the responsibility of the end-user to determine at the time of disposal of the product.

SECTION 12 TOXICOLOGICAL INFORMATION

Inhalation:	Fumes from heated product may be corrosive to mucous membranes and the respiratory system. Fumes may cause burning sensation, coughing, wheezing, shortness of breath, cyanosis, fever, chills, muscular pain, anemia, metallic taste in the mouth, headache, nausea, vomiting, sweating, diarrhea and pulmonary edema. Fumes may cause stannosis, a mild benign pneumoconiosis. Repeated inhalation of fumes may cause occupational asthma. Symptoms may be delayed.
Skin:	Contact may cause irritation, ulcerations, burns or dermatitis. Symptoms may be delayed.
Eye:	Vapors or fumes may cause redness, pain, blurred vision and corneal damage. Direct contact may cause burns and eye damage with possible blindness. Symptoms may be delayed.
Ingestion:	May cause irritation or burns to the mouth and throat, nausea, vomiting or diarrhea. Death may occur from strictures of the esophagus and pylorus. Symptoms may be delayed.
Toxicity Data:	Petrolatum: No data available Zinc Chloride: Oral rat LD50: 350 mg/kg Ammonium Chloride: Oral rat LD50: 1,650 mg/kg Bismuth: Oral rat LD50: 5 mg/kg Tin: No data available Copper: No data available
Sensitization:	None of the components are known to cause sensitization.
Carcinogenicity:	None of the components are listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA.
Mutagenicity:	None of the components have been found to be mutagenic.
Reproductive Toxicity:	None of the components are known to cause adverse reproductive effects.
Medical Conditions Aggravated By Exposure:	Persons with pre-existing skin, lung, kidney or liver disorders may be at increased risk from exposure to this product.

SECTION 13 TRANSPORTATION INFORMATION

DOT

Proper Shipping Name:	Zinc Chloride Mixture
Hazard Class/Packing Group:	8, PG III
UN/NA Number:	UN1840
Hazard Labels:	Corrosive (Class 8)

IMDG

Proper Shipping Name:	Zinc Chloride Mixture
Hazard Class/Packing Group:	8, PG III
UN Number:	UN1840
Label:	Corrosive

RCRA Hazardous Waste Number: None

EPA Hazardous Waste ID Number: D002

EPA Hazard Waste Class: Corrosive

SECTION 14 REGULATIONS

Hazard Category for Section 311/312: Acute Health, Chronic Health

Section 302 Extremely Hazardous Substances (TPQ): This product does not contain chemicals regulated under SARA Section 302.

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

Chemical	CAS #	%
Zinc Chloride	7646-85-7	15-25%
Copper	7440-50-8	0-1%

CERCLA 103 Reportable Quantity: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Zinc Chloride (25% maximum) of 1,000 lbs, is 4,000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65: This product does not contain chemicals regulated under California Proposition 65.

TSCA Inventory: All of the components of this product are listed on the TSCA inventory.

SECTION 15 DISCLAIMER

The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.